International Journal of Audiology

ISSN: 1499-2027 (Print) 1708-8186 (Online) Journal homepage: www.tandfonline.com/journals/iija20

Adult client perspectives of barriers and facilitators to successfully communicating about listening needs and concerns during audiology appointments: a qualitative study

Zoe McNeice, Dani Tomlin, Barbra Timmer, Camille E. Short & Karyn Galvin

To cite this article: Zoe McNeice, Dani Tomlin, Barbra Timmer, Camille E. Short & Karyn Galvin (2025) Adult client perspectives of barriers and facilitators to successfully communicating about listening needs and concerns during audiology appointments: a qualitative study, International Journal of Audiology, 64:9, 934-944, DOI: 10.1080/14992027.2025.2467775

To link to this article: https://doi.org/10.1080/14992027.2025.2467775

INTERNATIONAL JOURNAL OF AUDIOLOGY
2025, VOL. 64, NO. 9, 934–944
https://doi.org/10.1080/14992027.2025.2467775

The British Society of Audiology
The International Society of Audiology
NAS NORDIC AUDIOLOGICAL SOCIETY
Taylor & Francis
Taylor & Francis Group

ORIGINAL ARTICLE

Adult client perspectives of barriers and facilitators to successfully communicating about listening needs and concerns during audiology appointments: a qualitative study

Zoe McNeice[a], Dani Tomlin[a], Barbra Timmer[b,c], Camille E. Short[a,d] and Karyn Galvin[a]

[a]Melbourne School of Health Sciences, University of Melbourne, Melbourne, VIC, Australia; [b]Centre for Hearing Research (CHEAR), School of Rehabilitation Sciences, University of Queensland, Brisbane, QLD, Australia; [c]Sonova AG, Staefa, Switzerland; [d]Melbourne Centre for Behaviour Change, Melbourne School of Psychological Sciences, University of Melbourne, Melbourne, VIC, Australia

ABSTRACT

Objective: This study aimed to understand clients' perspectives on the barriers and facilitators experienced when communicating about their listening needs and concerns with their audiologist.

Design: Qualitative descriptive methodology using individual semi-structured interviews. Template analysis was used to analyse the data.

Study sample: Fifteen audiology clients who self-reported listening difficulties.

Results: Six themes relating to barriers and/or facilitators were identified: (1) audiologist's communication style, (2) audiologist's demonstrations of understanding, (3) development of therapeutic relationship, (4) client's awareness and understanding, (5) client's personality and lifestyle characteristics and (6) clinic's operational factors.

Conclusion: Identified barriers and facilitators suggest that audiologists should tailor their communication style for individual clients and invest in developing strong therapeutic relationships. Supporting clients' awareness and understanding can be achieved through improved appointment preparation, such as by encouraging client self-reflection on their listening needs and concerns and providing information about appointment expectations. Audiology clinics should consider all aspects of their service provision and how these relate to communication during appointments. An intervention approach addressing these reported barriers and facilitators could support clients to successfully communicate about their listening needs and concerns with their audiologist.

ARTICLE HISTORY
Received 6 August 2024
Revised 4 February 2025
Accepted 7 February 2025

KEYWORDS
Listening difficulties; qualitative; client-centered care; rehabilitation; clinician-client communication

Introduction

Aural rehabilitation is the primary method for reducing the participation restrictions and activity limitations experienced by people with listening difficulties (Boothroyd 2007). As part of aural rehabilitation, audiologists may recommend hearing devices; in fact, hearing aids are the most commonly recommended intervention for people with listening difficulties (Chisolm et al. 2007; Kochkin 2011). Hearing aids have been shown to have positive impacts on quality of life and wellbeing (Brodie, Smith, and Ray 2018; Chisolm et al. 2007; Wolff et al. 2024) by, for example, reducing listening-related fatigue and reducing the social participation restrictions that are associated with listening difficulties (Holman, Drummond, and Naylor 2021). Worldwide, 401.4 million people are 'in need' of hearing aids (Orji et al. 2020). Despite the benefit that hearing aids can provide, and recent improvements in hearing aid technology, hearing aid uptake and usage rates remain low (National Institute on Deafness and Other Communication Disorders 2021). Even in high-income countries, it is estimated that only 57% of people who need hearing aids own them (Bisgaard et al. 2022). A population-based survey of a group of almost 1000 older Australian adults found that, of those with a diagnosed hearing loss, only 33% of people chose to obtain hearing aids, and, of those who obtained hearing aid(s), 25% reported that they never used them (Hartley et al. 2010).

Increased hearing aid uptake and usage is linked to having a greater degree of hearing loss, heightened self-awareness of hearing difficulties, a higher perceived benefit from hearing aids and greater support from significant others (Gallagher and Woodside 2018; Hickson et al. 2014; Knoetze et al. 2023; Knudsen et al. 2010; Ng and Loke 2015). The interactions between the client and their audiologist can also influence hearing aid uptake and usage rates (Amlani 2020; Meyer et al. 2017). Poost-Foroosh et al. (2011) identified factors within the client-audiologist interaction that could positively influence hearing aid purchase decisions across two overarching themes: client-centred interactions and client empowerment. Client-centred care is a holistic approach to care, in which the client is recognised as an individual and encouraged to be actively involved in their own healthcare (Hughes, Bamford, and May 2008). In the context of the work by Poost-Foroosh et al., the theme of client-centred

CONTACT Zoe McNeice zoe.mcneice@unimelb.edu.au Melbourne School of Health Sciences, University of Melbourne, Melbourne, VIC, Australia

Supplemental data for this article can be accessed online at https://doi.org/10.1080/14992027.2025.2467775.

interactions shared similar components with models of client-centred care, such as ensuring client comfort, understanding and meeting client needs, and acknowledging the client as an individual. The theme of client empowerment included providing information to the client and supporting the client's choices and involvement in decision-making. Positive client-audiologist interactions have also been associated with improved client satisfaction and participation during appointments, and with the development of the therapeutic relationship (Grenness et al. 2014; Poost-Foroosh et al. 2011; Sciacca et al. 2017). Communication is an important dimension of client-audiologist interactions and of client-centred care (Zill et al. 2015) and is therefore a critical factor to understand in order to optimise aural rehabilitation outcomes.

Clients have reported a desire for their audiologist to understand their unique needs (Grenness et al. 2014; Laplante-Lévesque, Hickson, and Worrall 2010), highlighting the significant role of the audiologist's communication style in effectively addressing those needs. Optimal hearing aid usage and client satisfaction are linked to the audiologist considering the specific listening difficulties and needs of the individual client (Jorgensen and Novak 2020; Laplante-Lévesque et al. 2013). Despite the clear benefits of understanding and addressing clients' individual experiences, clients report feeling unheard (Ekberg, Grenness, and Hickson 2014; Galvin et al. 2024; Grenness et al. 2014). This disconnect is further highlighted in research exploring the impact of the audiologist's communication style on audiology appointments (Grenness et al. 2015a, 2015b; Sciacca et al. 2017). These studies suggest that clients are not always provided with appropriate opportunities to share details about their listening difficulties and concerns. Moreover, the way an audiologist responds to a client's concerns may contribute to that client feeling unheard (Coleman et al. 2018). The analysis by Coleman et al. identified missed opportunities for the audiologist to validate the client's experience during clinical interactions. It is important that clients feel that they have been listened to, and that their concerns have been addressed, as this helps them to feel that their experience and perspective matter. This has been documented in both audiological and broader healthcare contexts (Grenness et al. 2014; Merrill and Grassley 2008; Nishikawara et al. 2023; Preminger et al. 2015).

One way to help clients to feel heard and that their concerns have been addressed is with the use of clinical tools. For example, the Living Well Tool developed by the Ida Institute (https://idainstitute.com/tools/living_well/), can play a crucial role in facilitating more successful client-audiologist interactions. The Living Well Tool is designed to be completed by clients prior to their initial audiology appointment and aims to help clients to better understand and manage their communication situations. Clients reported that the tool facilitated development of the client-audiologist relationship and helped them to be involved in the appointment (Scarinci et al. 2022). An interview tool, based on the International Classification of Functioning, Disability and Health (ICF), aims to ensure that all relevant aspects of a client's daily functioning are addressed during their aural rehabilitation (Granberg and Skagerstrand 2022). Audiologists reported that the interview tool helped them to collect information from clients, and that it helped clients to understand the scope of aural rehabilitation, including its holistic nature. Despite the availability of promising, evidence-based tools and training to support communication, the reasons *why* clients sometimes struggle to effectively communicate their listening needs and concerns to their audiologist remains unknown. Most of the research underpinning the development of these clinical tools has focused on the need to empower audiologists to communicate in a more client-centred manner (Ekberg, Grenness, and Hickson 2014; Grenness et al. 2014, 2015a, 2015b; Meyer et al. 2017). Comparatively little research has been completed exploring the client's preferences for how they would like to communicate with their audiologist. Further exploration of how and why clients report feeling unheard by their audiologist could lead to the development of interventions to support clients to more successfully communicate their needs and concerns to their audiologist.

A recent scoping review failed to identify any published studies examining how adults communicate about their listening difficulties during their audiology appointments (McNeice et al. 2024a). A subsequent interview study was conducted in which clients reflected on and described their experiences during audiology appointments. Client recollections of what was and was not successfully communicated to their audiologist are reported in McNeice et al. (2024b), and the barriers and facilitators that these clients perceived when communicating are reported in the present paper. Clients reported successfully describing situations, impacts, contributing factors, and their own behavioural responses related to their listening difficulties (McNeice et al. 2024b). Importantly, clients reported that they did not successfully communicate about (1) their emotional concerns and the impacts they experienced as a result of their listening difficulties, (2) their perceptions of sound quality (for example, describing problems with hearing aid sound quality) or (3) their changed listening experiences (for example, not successfully describing increased listening difficulties). Attribution theory, which describes how people perceive the causes of their experiences, provides a rationale for examining the barriers and facilitators that clients encounter when communicating with their audiologist (Heider 1958; Manusov and Spitzberg 2008). For instance, clients may attribute their communication experiences to internal factors, such as their own ability to describe their experience, or external factors, such as the audiologist's clinical style. Addressing these attributions could potentially improve the communication experience for the client. Accordingly, during the interviews completed by McNeice et al. (2024b), participants were also asked to describe the barriers and facilitators they experienced to communicating with their audiologist. Understanding these barriers and facilitators is an important preliminary step to enhancing communication during audiology appointments (Mummah et al. 2016; Skivington et al. 2021). Thus, the aim of the present paper is to describe the barriers and facilitators that clients perceive when communicating about their listening needs and concerns with their audiologist.

Methods

The perspectives of adults who had experience of audiology appointments were sought. Participants were asked to self-reflect on their listening difficulties over a two-week period, followed by a semi-structured interview. The University of Melbourne Ethics Committee approved this research (Reference number: 2022-22396-24732-3) and the study was conducted in 2022 in Victoria, Australia.

Participants

Eligible participants were adults (≥18 years of age) who had previously consulted an audiologist about their listening difficulties and were comfortable with completing spoken interviews in English. Potential participants were excluded if they had a previous clinical relationship with the researchers. There was no

exclusion criteria related to hearing levels. Recruitment occurred using a variety of methods. Printed flyers were displayed in audiology clinics and the researchers shared a concise 75-word study advertisement with their professional networks, such as on LinkedIn. Word-of-mouth referrals also played a significant role in participant recruitment. The researchers aimed to recruit a diverse sample in terms of participant age, gender, hearing loss, hearing device usage, and view (positive or negative) of their previous audiology appointments. Recruitment and interviews were conducted on a rolling basis. Data saturation and sample diversity were reviewed in regular meetings with the researchers. After the fifteenth interview, data saturation was reached, meaning no new codes or themes were identified from the data. Additionally, the sample diversity was deemed sufficient by the study team, and so no further recruitment was necessary. All participants provided informed consent and Table 1 contains a summary of their characteristics.

Materials

A pre-recorded video featuring author ZM was used to explain the purpose of the study to participants and to encourage them to have a heightened awareness of their listening difficulties over a two-week period. This approach is supported by previous research, which has shown that pre-appointment self-reflection on listening needs can better prepare clients to share and communicate their needs during audiology appointments (Heffernan, Maidment, and Ferguson 2023). Given that this research is intended to inform future interventions focused on communicating unmet needs, it seemed prudent to prime participants' attention towards these needs in this protocol. The following participant characteristics were collected using the Qualtrics online survey platform: age, gender, hearing device usage, their attitude towards hearing devices, how positively they viewed their previous audiology appointments, and self-reported hearing ability using the Revised Hearing Handicap Inventory-Screening (RHHI-S) (Cassarly et al. 2020). The RHHI-S results were used to help frame interview questions.

The interview guide was designed to elicit information to answer the research questions and was developed through a series of discussions between all authors. It was also piloted with five consumer advisors who were all adults who had previously attended audiology appointments. The authors have experience as practicing clinical audiologists (BT, DT, KG, ZM), experience conducting research with adult participants with hearing loss (BT, DT, KG) and experience conducting qualitative research (CS, BT, DT, KG). The final interview guide can be found in Online Appendix 1. The interviewer also used probing questions to encourage comprehensive responses, for example, "*could you tell me more about that?*".

Procedure

Following their recruitment, each participant was emailed the pre-recorded video and a link to access the participant characteristics survey. Two weeks later, author ZM conducted a one-on-one semi-structured interview with the participant. Interviews were held either virtually or face-to-face at the University of Melbourne, with all participants, including the researcher, located in a private meeting room. The scheduling of these interviews was done at the convenience of the participants. For the recording process, virtual interviews were conducted and recorded using Zoom as the video conferencing platform. The single face-to-face interview was recorded using Zoom and was audio-recorded only at the participant's request. Automated closed captioning was enabled during all interviews to support effective communication. Field notes were taken occasionally to support interpretation during the subsequent transcription of the interview. Interviews ranged from 23 minutes to 1 hour and 45 minutes (mean = 44 minutes; SD = 20 minutes).

Data processing and analysis

Zoom-generated transcripts were verified and edited for accuracy by author ZM, with identifying information removed. The transcripts were analysed using QSR NVivo software (Version 1.6.1) through template analysis. Template analysis is a form of thematic analysis which allows flexible and descriptive theme identification, and suited the purpose of the study aims (Brooks et al. 2015). During this template analysis, no *a priori* codes were selected. Author ZM used all interview transcripts to create initial data-driven codes. These codes were then grouped into themes to form the initial template. As the analysis of the interview transcripts progressed, this initial template was further developed and reorganised. The initial template was very detailed, thus revisions often involved merging and renaming of similar codes. Mind maps were used to support the identification of themes and categories, and the further development of the template. These visual representations of codes enabled the authors to identify how codes interacted with one another. The authors met at two-week intervals throughout the data collection and analysis phases to discuss codes, themes and

Table 1. Summary of participant characteristics ($n = 15$).

Participant characteristics	
Gender	
Male (n)	7
Female (n)	8
Devices	
No devices (n)	4
Hearing device(s) user (n)	11
Age (years) Mean; standard deviation (range)	58.6; 20.6 (18–76)
RHHI-S score (maximum possible score = 40) Mean; standard deviation (range)[a]	21.3; 12.0 (0–40)
Attitude towards hearing devices	
Negative (n)	2
Neutral (n)	2
Positive (n)	11
Attitude regarding interactions in previous audiology appointments	
Negative (n)	2
Neutral (n)	4
Positive (n)	9

[a]Revised Hearing Handicap Inventory-Screening (RHHI-S)

transcript excerpts which supported trustworthiness of the analysis. The template was considered to be final when it could accommodate all relevant data, and every code, theme, and category had been given a descriptive name. To maximise the reliability of the template, all authors independently coded a randomly selected interview (Participant 07) and, together, reviewed the candidate themes for coherence and relation to the data set. Any discrepancies were discussed until authors reached a consensus. Author reflexivity was acknowledged, particularly author ZM's experience as a clinical audiologist, which affected data interpretation. For example, author ZM may have reflexively been more attentive to listening difficulties which are less commonly described during audiology appointments.

Results

Analysis of the interview transcripts led to the identification of six themes: (1) communication style, (2) demonstrations of understanding, (3) development of therapeutic relationship, (4) awareness and understanding, (5) personality and lifestyle characteristics and (6) operational factors. The themes were categorised as being related to the audiologist, the client or the clinic. See Table 2 for an overview of the findings.

Category 1: audiologist

Communication style

The audiologist's communication style could be a barrier or facilitator for participants when describing their listening needs and concerns. Participants reported that they did not always feel that they had an opportunity to describe their listening needs, which was a barrier to their communication.

> I don't think the appointments feel too rushed, but sometimes I found with my audiologist is [that] he does a lot of the talking, and you can't always get a word in edgeways, or you just don't get around to talking about something [P01].

Participants reported that they sometimes did not have the opportunity to fully describe their listening difficulties when their audiologist used closed-ended questions. At other times closed-ended questions and prompts were considered helpful.

> He asks a lot of closed-ended questions, so you don't necessarily get that same level of interaction [P01].

Participants reported that a facilitator to describing their listening needs was when the audiologist asked them to document what they would like to cover prior to the appointment. One participant reported that this was done routinely by their audiologist. Another participant raised this as something that they would like to happen.

> It would be really good if [audiologist] asked me before the appointment to write out some things I would like to focus on, but that doesn't seem to crop up. Maybe I need to take a different approach and actually email, and say in this appointment, can you please cover this, this and this [P12].

Participants reported that sometimes they felt listened to by their audiologist, and sometimes they did not.

> My first impression was that she didn't want to hear me, didn't want to listen to what I said. She was fitting me with hearing aids, and I said "I couldn't live without these because I can't understand what people say if I don't have them, and I can't hear music if I don't. So, conducting an orchestra would be impossible without them". And she said, "Oh no, the music is not important. The talking is important". Well, it is, but music's my life you know, so she just dismisses that. That doesn't matter. It's hearing what people say is important. Well, she's correct, but she wasn't sort of hearing what I was saying to her [P13].

Generally, participants reported that the quality of the audiologist's communication was a facilitator, as audiologists used appropriate communication behaviours to account for their hearing loss.

> Training must be good for audiologists because they know to speak clearly and they know to speak to you, and not sort of around [P06].

They also reported feeling that audiologists were generally focused and engaged during appointments, which was perceived as a facilitator when describing their listening needs and concerns.

> Everyone's so personable, and just actually interested and engaged in what you're talking about. It's definitely not just a one-way interaction [P02].

Demonstrations of understanding

The barriers and facilitators that participants discussed often related to how well they perceived their audiologist understood their experience. They expressed a desire for their audiologist to

Table 2. Overview of the three categories and six themes related to clients' communication about their listening needs and concerns with their audiologist, with example quotes.

Categories	Themes	Example quotes
Audiologist	Communication style	"I guess, and this would depend on the individual audiologist, but yeah … their openness to ask more so you feel like you can tell more" [P09].
	Demonstrations of understanding	"Definitely if they listen to you. It makes a difference if they hear what you say, internalize it, and repeat it back to you to ensure that they're getting the full message" [P08].
	Development of therapeutic relationship	"It can be stressful discussing [emotional concerns] especially if it's with a new audiologist, or an audiologist you're not particularly familiar with … if they create a welcoming environment where you can talk about what's bothering you, and 'I'm here to help you as a person', that would definitely increase the likelihood that I would have that kind of conversation" [P08].
Client	Awareness and understanding	"What I would do … is have it very clear in my mind what the issues were. So that I knew when I walked in, I could say this, this and this … Even write them down" [P13]. "I didn't even know where to go when I first realised that I was having a big issue … to some extent it's a bit of the education process too, in what an audiologist can help you with" [P07].
	Personality and lifestyle characteristics	"I feel that for some people there might be a level of denial. That they might not want to disclose all the information purely because they're concerned that if they disclose the information, then [they will be told something] they didn't want to hear. That's a reason why I might hold something back" [P03].
Clinic	Operational factors	"I felt that they were being rushed … that there were several people waiting in the waiting room … so if it wasn't a major issue I should leave it until it became something more. You're not given a time for an appointment normally, you're given a time to be there, but you don't understand whether the audiologist has half an hour for you, or ten minutes for you" [P07].

understand certain topics, such as the impact that listening difficulties can have on general wellbeing. There were instances where participants felt that their audiologist did not fully understand these impacts, which they found to be a barrier to effective communication.

> The audiologist is tied up in computers and frequencies and hearing tests. I'm not sure they always relate to the fact … that there's something really serious happening in this bloke's life … there needs to be some element of recognition that the person who's there is a stressed person [P13].

> If I felt they were able to deal with some of the emotion, it would be more comfortable to speak to them. Probably more so than anyone else, because you would think that might be the person that can ultimately help you, probably even more so than the GP. That's why the clinics at [place name] were good, because it was far more than just the deafness [P09].

Participants reported that the audiologists' individual prior experience shaped how well they would understand the participants' listening difficulties. The experiences mentioned by the participants were if the audiologist had experienced listening difficulties themselves, whether they had experience with a particular situation (for example, if they had a musical background), and whether they had experience from working with others who had similar difficulties.

> He [audiologist] doesn't wear hearing aids. He has never gone through that and being a child and having hearing loss, you're often singled out for a lot of different reasons. So, for a long time, I really hid that and I don't think that he really understands that very well [P01].

> An audiologist should have had sufficient … not experience but … enough people telling them what it's like [P05].

Participants reported that the appropriateness of their audiologists' response and follow-up questions determined whether they felt that they had successfully communicated their listening needs and concerns.

> They actually ask follow up questions, rather than just let me talk which I think is important … With follow up questions, it's showing that they're properly interested and understand what I've been saying. A lot of the time, they'll rephrase something that I've said, and then ask a bit more about it. So, you can sort of see that they're actively listening and engaging [P02].

Participants talked about the alignment between the audiologist's test results and their own experiences of listening difficulties. When there was a misalignment, and their audiologist's interpretation of their listening difficulties was different to their own experience, this sometimes caused participants to doubt themselves.

> It was when I felt there was something changing [which was] not always shown when the audiologist did the test. I felt that I was not on top of things, and they [audiologist] said no, everything is very similar to what it has been … sometimes it makes you think I don't understand myself, when you're told that basically the test says there's been virtually no loss [P07].

Development of therapeutic relationship

Participants described the development of the therapeutic relationship in relation to describing their listening needs and concerns. The quality of the therapeutic relationship and the extent to which care was individualised affected how participants described their listening difficulties.

> We're all different, but I think we're all treated the same. Even though we're all different and our needs are different [P12].

As part of a quality therapeutic relationship, participants reported positive experiences when the audiologist's goals were aligned with their own and when they received holistic care. Similarly to previous results, there was diversity in participant responses and barriers and facilitators were discussed in relation to this idea of alignment.

> It's always been positive for me because it's revolved around communication rather than dealing with the hearing loss because that's not going away. It's about dealing with the communication with the person in front of them which I've really appreciated [P02].

> I think I was getting to know one of the audiologists I was working with and she started to look at the whole picture. I think sometimes you're just seen as a pair of ears and things are sticking to them almost. They don't have time to know about your lifestyle or sort of what it is that you really need from hearing. We all need basics, but everybody has different situations that they want to feel happy [P07].

Once participants felt that they had established good rapport with their clinician, they found it easier to discuss their listening concerns. This was identified as a facilitator to communication.

> I think it's that sense of continuity is what I feel I'm lacking, seeing the same person regularly. I don't mean every few weeks, but a bit like the doctor that someone that over time, they've got to the stage of understanding what it is you're looking for and why you come in and say I feel there's been a loss in my hearing, when the test says no there hasn't. So, what's been going on in your life that makes you sense that? I don't think they've generally had the time to ask that question, or for me to actually think about it in that way [P07].

> I think that's having one or two of the same people, but it's also the period of gaining confidence that you can talk openly about it [P07].

Category 2: client

Awareness and understanding

Participants reported that knowing what to expect before seeing an audiologist could facilitate their descriptions of listening difficulties.

> I didn't know really where to go when I first realised I was having a big issue. To some extent it's a bit of the education process in what the audiologist can help you with so that people feel comfortable that they're going to feel better at the end of it than they did walking in the door [P07].

Participants also reported that self-reflection about their listening difficulties before their appointment would support their own ability to describe their difficulties and help to ensure that they did not omit important details. They reported that making notes prior to appointments would be helpful for them, either as a self-initiated activity or via a pre-appointment questionnaire supplied by the audiologist. Participants commonly reported forgetting something they had previously meant to mention to their audiologist which was another reason they recommended documenting listening difficulties in advance.

> I should probably reflect before going to appointments. More in terms of, if I'm in a situation and it's just happened and I've struggled, then I should probably note it at the time, because I'd often just forget and move on [P02].

> I would say go in with a list of concerns. Because that's what I did, I brought a notebook with me, and that really helped me in my first appointment [to] describe exactly what was going on [P08].

> It'd be great if audiologists put out a bit of a questionnaire in the weeks leading up to appointments and just emailed a few questions under different categories. Can you fill this and return it, and if the patient did, terrific. They could include things in the appointment if there's time. I'd find that really, probably helpful [P12].

Participants were unaware of what information was relevant for their audiologist to know. Sometimes this meant they did not

share concerns that they had, or did not describe all of their listening difficulties.

> I probably wouldn't talk about the mental and emotional stuff because they don't have the time or the expertise to listen to it anyway [P09].

> I couldn't tell her [audiologist] what my difficulties were, because I didn't know the parameters of her necessity to know [P11].

Participants also experienced difficulty when trying to find words to describe a certain sound quality. They did not want to use words that did not accurately convey what they were experiencing.

> Understanding what words audiologists find useful when it comes to describing noise [P07].

Participants talked about how their awareness, or lack of awareness, of their own listening difficulties affected how they described them.

> I think a lot of the time I don't move through life with a lot of awareness of what's going on with my hearing, because I've been used to it for so long. Sometimes I don't pick up that I'm skipping words and people's sentences if I don't understand exactly what they've said. So, I feel like if I was a little bit more aware of the exact problems that I was having, rather than slipping back into that behaviour of "it's okay if I don't understand, I'll just ignore it and move on". That would definitely help me to be able to properly discuss my issues with my audiologists [P08].

Participants reported that understanding their hearing test results in relation to their experienced listening difficulties affected how they described their listening difficulties. They felt that having a better understanding of the expected impacts on their everyday life, based on their hearing test results, would be helpful.

> I know that I've a loss in both ears, it's pretty similar, I have a loss on the vowels and things like that, but you know, what does that mean in real life? It's things like the tram noise, because in fact, that's where my peak hearing is, is at that sort of level of noise. Those are the types of things that would be interesting to have more feedback on. Understanding exactly what the loss is and therefore, I think that would help me understand that in this situation, my loss is such that, this situation is always going to cause me a problem [P07].

> I think if I had an understanding of the impact of where that loss that the audiologist finds from the test would impact, that could be very useful [P07].

Participants considered that gaining an understanding of the experiences of others with listening difficulties would be helpful for them. This could be through direct connections with others with listening difficulties or by being educated by the audiologist about the listening difficulties and coping strategies used by others in similar situations.

> I think sometimes it'd be really helpful to be able to get with other people who've got similar hearing losses and just have a discussion about things [P12].

Personality and lifestyle characteristics

Other individual factors affecting how participants described their listening needs and concerns related to their attitudes towards hearing loss and/or hearing aids. They may have felt negatively towards appointments because of receiving test results and treatment recommendations that were unwelcome.

> I guess, as a teenager as well, there was a lot of times where I was told I needed to do something, like wear my hearing aids at school, and I really didn't want to do that. So, I didn't come out of those appointments feeling positive [P01].

When asked about what advice they would give to others when describing listening difficulties to their audiologist, one participant reported that they would advise others "*to ask a lot of questions. Question everything, because then you become informed. And you know what you're in for. And what's being done for you. If you don't question it, the audiologist will just say, this is how it works. This is what we do. We know because we're the experts. And you need to be an expert yourself*" *[P13].*

One participant considered that their good support network of friends meant that they did not have a need to tell the audiologist about the emotional impacts of hearing loss. They preferred to keep the audiology appointment focused on the technical aspects of hearing loss and hearing aids.

The final individual factor related to the cost of hearing aids. Participants sometimes avoided describing their difficulties in case they were advised to purchase expensive technology.

> If we go for a test and they say we need hearing aids, but you know, they're going to cost us more money than we've got at the moment then what do we do? We walk away unhappy [P07].

Category 3: clinic

Operational factors

Participants experienced barriers and facilitators to describing their listening difficulties which were related to how the audiology clinic operated. Knowing the expectations for the appointment in advance was a facilitator to describing listening difficulties; for example, knowing the appointment length and how much time was allocated to certain activities within the appointment.

> Having an idea of how long the appointment is would actually be quite helpful and constructive. Because I think at GPs you can book short and long appointments. So, you sort of know how much you can address, so knowing that might actually be helpful [P02].

> I think knowing the time. So that, if you're going to have a test you sort of have some sense it's going to be about 'this' time. But, on top of that we've got ten minutes we can talk in general, or we can just do the test but we'll make a separate appointment to have a conversation about that afterwards. Walking in the door, you don't have any sense of am I taking valuable time from someone who really needs it, when I'm just looking to modify something rather than start from scratch [P07].

Participants found it helpful when they understood the structure of the appointment beforehand. Sometimes, when the structure had been determined by the audiologist, participants were not given the opportunity to address what they felt they needed to.

> It's see the audiologist once a year. And the appointment has got a set time. I think the session is already mapped out. He's [audiologist] really focusing on my hearing levels, checking what I can hear, are my hearing aids working, is the recharger working, all that sort of thing. And then that seems to be the end of the appointment and all the other things that I'd benefit from discussing and finding out about, exploring, there's not an opportunity because of the time restraints [P12].

Participants prioritised what to talk about during appointments because they were aware that the appointment time was limited.

> I don't think there'll probably be time to tell a new audiologist about that sort of thing [detailed description of listening difficulties]. I think I would be actually focusing on the technology side of things [P12].

Having more time, or a second appointment in the year, was considered as a facilitator to addressing additional concerns.

> It would be helpful actually to have a second appointment during the year, six months later, to actually cover things like the actual experience of living with a hearing disability and how things could be improved and how I could find technology more useful [P12].

Participants also referred to the presence of other clients as impacting their discussion with the audiologist. When they saw that the waiting room was full, some participants had the impression that the audiologist was short on time and so may not be able to address all of the things the participant had initially planned to discuss during the appointment.

> I don't know how it all works but maybe there's a time element that they say well each session with a client is going to take this long. At the end of that session, regardless, we've got to get on to the next one, or we're not going to have lunch, and I understand all that. It's just a feeling I get sometimes that the appointment, because of the number of people waiting, has to be gone through and done and then we're onto the next one [P10].

Participants also reported situations in which clinic administrative staff did not always recognise, or show understanding of, the impacts of listening difficulties.

> I would think that if I was given a front desk position in audiology, that there are some things you should be able to help that person with. I think they could be a little more compassionate about how they deal with you [P09].

Discussion

This research explored the barriers and facilitators to successful communication perceived by adult clients when describing their listening needs and concerns to their audiologist. Participants described barriers and facilitators that related to the audiologist, the client or the clinic. Sometimes there was overlap between the barriers and facilitators across these three different categories.

From the perspective of their clients, audiologists play an important role in facilitating clients' communication of their listening needs and concerns by providing opportunities for this to occur. However, participants often perceived that the structure of the appointment had been pre-determined by their audiologist, leaving limited opportunity to address their own concerns once audiologist-led tasks had been completed. Depending on the type of question, the questions asked by audiologists can act as either barriers or facilitators for clients when sharing their concerns. Research indicates that audiologists often initiate appointments with a closed-ended confirmation for the clients' reason for attending (62% of encounters), while completely open-ended questions were used less frequently (22% of encounters) (Grenness et al. 2015a). A different study reported that the agenda reflected the audiologist's plan in 60% of encounters (Coleman et al. 2018). Audiologists typically do have an agenda for some types of appointments to ensure best-practice audiological care. Nevertheless, it is also important that clients are provided with opportunities to share their listening needs and concerns and to contribute to the agenda-setting for the appointment.

Participants identified that having an increased awareness of their listening difficulties and appointment expectations was a facilitator of successful communication. Clinical tools such as the Living Well Tool (Scarinci et al. 2022) help clients to better understand their listening difficulties, and to better prepare for appointments. Sending pre-appointment questions to clients about the emotional impacts of hearing loss to prompt self-reflection (Nickbakht et al. 2023) or using ecological momentary assessment approaches to document listening difficulties (Timmer, Launer, and Hickson 2021; Vercammen et al. 2023) have also been shown to support clients in effectively communicating their listening needs and concerns. Participants reported lacking awareness of which topics were appropriate to raise during their appointment. They had concerns about burdening the audiologist with what they perceived as potentially irrelevant details, echoing concerns described by patients with other chronic health conditions (Lim et al. 2016). Consequently, participants reported withholding some details, and reported feeling that they needed to let the audiologist lead the appointment. Participants in the present study also reported that they would withhold information from their audiologist if they felt like they were taking up too much appointment time, despite being unaware of the actual length of their appointment. Similar issues are seen in primary healthcare, with patients generally unaware of their appointment length prior to the appointment, and clinicians are often unaware of what the patient would like to address during the appointment (Matulis and McCoy 2021). Informing clients about the appointment duration in advance is another way to improve their awareness of appointment expectations and could help them to prepare better and understand the time available for discussing their listening needs and concerns.

Participants' understanding and communication of their listening needs and concerns were influenced by their hearing test results and the feedback they received from the audiologist. Participants considered the alignment of their listening difficulties with the audiologist's test results. When there was misalignment, participants felt that their own communication had been unsuccessful, or they doubted the validity of their own experiences. This experience is consistent with previous research, which identified that clients may feel unheard during appointments when audiologist responses do not align with their reported concerns (English et al. 1999). This underscores the importance of recognising the client's experience together with hearing test results. Participants felt that they contributed their everyday experiences of listening difficulties, while audiologists contributed the hearing test results. When these two elements were aligned, participants felt greater trust in their audiologist and confidence in the audiologist's understanding of their listening difficulties. Hearing test results can also be used to help to validate client experiences. This finding is consistent with Preminger et al. (2015), who reported that clients had greater trust in their audiologist when the test results aligned with their own interpretation of their hearing loss. This trust can help to strengthen the therapeutic relationship and, in turn, facilitate more effective communication of client needs. It is important to acknowledge that, in some cases, hearing test results may not align with client experiences, regardless of how they are presented. For example, clients with normal pure tone audiometry results may still experience listening difficulties. While hearing test results cannot always be used to help to validate client experiences, it is important that audiologists do not dismiss client experiences when they differ from the test results. Instead, these instances could be viewed as opportunities for deeper exploration and understanding of the client's individual situation.

Participants described a preference for individualised care from their audiologist, echoing findings from previous studies (Grenness et al. 2014; Laplante-Lévesque, Hickson, and Worrall 2010) and models of client-centred care (Scholl et al. 2014; Zill et al. 2015). They expressed a desire for a shared understanding between themselves and their audiologist about the impact that listening difficulties had on their overall well-being. Some participants felt that their audiologist had successfully understood their individual listening needs and concerns whilst other participants felt that their concerns had been dismissed. Clients recognise that they are experts in how they are affected by their own listening difficulties, and that they need to communicate these experiences to their audiologist in order for the audiologist to

take appropriate individualised actions (Grenness et al. 2014). Audiologists also place high importance on the clients' perspective during clinical decision making (Boisvert et al. 2017) and should aim to fully understand clients' experiences in order to address their concerns in an individualised manner (Dockens et al. 2017). Despite this shared recognition of the value of client involvement in audiology appointments, clients often assume a passive role and expect the audiologist to lead appointments (Coleman et al. 2018; Laplante-Lévesque, Hickson, and Worrall 2010). A positive therapeutic relationship can encourage clients to feel more comfortable sharing information about their experiences and needs, both in audiological contexts (Grenness et al. 2014) and general medical contexts (Lim et al. 2016). This highlights the importance of developing a therapeutic relationship as a foundation for providing individualised, client-centred care.

Participants reported being more comfortable in sharing information about their listening needs when they experienced audiologist continuity and had developed a good rapport with an audiologist. This finding contrasts with Bennett, Meyer, and Eikelboom (2016), who found no significant differences in hearing aid outcomes between clients who saw one versus multiple audiologists over a series of appointments. A possible reason for these contrasting findings is that the participants in the study by Bennett et al. were not randomly assigned to a group. As a result, they may have self-selected to see a single audiologist by choosing to wait longer for their appointment, if audiologist continuity was important to them. Additionally, Bennett et al. measured hearing aid outcomes such as hearing aid use, residual hearing difficulties, hearing aid problems, hearing aid management skills, hearing aid satisfaction, and audiologist satisfaction. These outcome measures do not directly address client's actual preference for having audiologist continuity. A therapeutic relationship which involves trust, interest and engagement is a key facilitator of communication, reported both in the present study and elsewhere (Grenness et al. 2014). There are a number of strategies that audiologists can use to develop a therapeutic relationship with clients. These strategies can be drawn from other healthcare fields, such as using counselling micro-skills, like active listening, to build trust and develop a therapeutic relationship with clients (Beck and Kulzer 2018). Audiologists can initiate the therapeutic relationship with clients in a positive way, however, participants in the present study reported needing time to feel comfortable sharing information with their audiologist.

Whilst the interview questions focused on communication *during* appointments, participants also provided their perspective on experiences within the clinic which occurred outside of the actual appointment but were a barrier to communication within the appointment. For example, it was reported that clinic administrative staff who were perceived as unsupportive, made the client apprehensive about asking for hearing aid adjustments, fearing delays in returning for appointments should further adjustments be needed. Participants also reported that a busy waiting room was a barrier to describing their concerns during appointments due to their perception that their appointment duration was limited. As far as the authors are aware, there is limited, or no research in the literature examining clinic operational factors and the influence they have on client communication during audiology appointments.

Strengths and limitations

A strength of the study design was the use of semi-structured interviews to identify the barriers and facilitators that clients perceived. The interviewer purposefully did not truncate any participant responses and encouraged further discussion with probing questions. This often led to participant narratives that were rich in detail. These narratives are central to attribution theory, as a person's internal dialogue plays an important role in how they explain events, which is a core aspect of attribution theory (Heider 1958). The fact that identified barriers and facilitators covered both internal (client) and external (audiologist and clinic) categories underscores the complexity involved in enhancing communication. It also highlights the need for a holistic approach to support successful client communication during audiology appointments.

Aside from characteristics considered during recruitment, other characteristics, such as educational attainment, ethnicity and socioeconomic status, may influence how clients communicate with their audiologist. These factors become particularly significant if they affect the power dynamic between the audiologist and the client, as has been observed in other healthcare contexts (Ali, Atkin, and Neal 2006; Caruso 2017; Moreland, French, and Cumming 2015). It is also possible that clients with different audiological characteristics, for example, a client with normal audiometric hearing who experiences listening difficulties, may describe their difficulties differently, or experience different barriers to describing their concerns to their audiologist. Future work should explore the perspectives of different client groups to develop greater understanding of the barriers and facilitators to communication for audiology clients with diverse needs.

Clinical implications and recommendations

Audiologists should recognise that some clients perceive barriers to describing their listening needs and concerns. Client self-reflection can facilitate communication and could be encouraged by audiologists by sending questions to their clients before appointments or encouraging clients to take notes about their experience whilst in their everyday listening environments. Some clients reported a barriers to raising concerns was if they felt that their concern was not within the scope of practice of audiologists or was not relevant to the appointment. One way to support clients to feel comfortable to raise their concerns is by sharing with them a prompt list of topics to discuss with the audiologist. Such topic prompt lists have been successfully used to improve information sharing during other types of healthcare appointments (Sansoni, Grootemaat, and Duncan 2015). Clinical tools such as the ICF-based interview tool contain questions that prompt clients to consider and share details about how their listening difficulties may be affecting their overall wellbeing (Granberg and Skagerstrand 2022). The questions posed to clients can help to clarify the audiologist's scope of practice. This can alleviate clients' concerns about the relevancy of their issues and help them to feel more comfortable to discuss them.

Audiologists should aim to provide clients with adequate opportunity to share their concerns. For example, using open questions during history-taking helps clients to feel a sense of control during their appointment and to feel better able to expand on their concerns (Grenness et al. 2015a). Shared agenda setting at the beginning of the appointment could align the appointment goals of the audiologist and client, however achieving all appointment goals can be challenging if sufficient time is not available. Allowing clients to submit their concerns prior to their appointment could assist with appointment planning by, for example, scheduling appointment duration (Gholamzadeh,

Abtahi, and Ghazisaeeidi 2021). Agenda setting in audiology appointments has been identified as an effective method to increase the involvement of clients and their family members (Ekberg et al. 2021), however, audiologists typically did not do this, despite training and coaching (Ekberg et al. 2023). Audiologists could consider agenda setting and offering flexible appointment lengths to effectively address all client concerns. Client perceptions of having limited opportunity to raise their concerns when the waiting room was busy could be alleviated by advising them in advance about the scheduled appointment duration. Audiologists could also reiterate this information at the beginning of the appointment to help clients to understand the appointment expectations and to feel more comfortable to raise their own concerns.

As part of effective client-centred care, it is not only important that audiologists understand clients' needs, but also that clients feel that their needs have been understood. Audiologists can help clients to feel that their needs have been understood by clearly explaining each step of the appointment and the rationale behind these steps. This may help clients to feel understood, and to feel that their own communication has been effective. Acknowledging and validating the perspectives of clients is important for fostering trust within the therapeutic relationship between audiologist and client. Whilst personal experience of listening difficulties is not a modifiable factor, audiologists without this experience can still demonstrate empathy by asking appropriate and personalised follow-up questions and summarising the client's story, thus showing an understanding of the client's reported difficulties (Parmar et al. 2022).

Clinic administrative staff are required to make judgements about the urgency of client needs when triaging clients and thus play a role in addressing the client's needs (Bennett et al. 2021). All clinic staff should aim to provide empathetic responses to clients and to act in a way that demonstrates an understanding of client needs. By supporting clients to communicate their needs, and providing opportunities for this to happen, audiologists can better position themselves to be able to effectively address these needs. Ensuring that clients feel that their needs have been addressed is an important aspect of successful aural rehabilitation (Timmer et al. 2024).

Conclusion

This study explored the barriers and facilitators to successful communication perceived by adults when communicating about their listening needs and concerns with their audiologist. It highlighted the need for audiologists to adapt their communication styles for different clients, the importance of a collaborative therapeutic relationship, and the value of client preparedness for appointments. Further research could incorporate these identified barriers and facilitators into the development of clinical tools which support clients to communicate about their listening needs and concerns with their audiologist. Providing communication opportunities and using strategies to support clients' communication capabilities could lead to more effective communication and improved aural rehabilitation outcomes.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Zoe McNeice http://orcid.org/0000-0001-5675-2883
Dani Tomlin http://orcid.org/0000-0002-7727-8807
Barbra Timmer http://orcid.org/0000-0003-2753-3491
Camille E. Short http://orcid.org/0000-0002-4177-4251
Karyn Galvin http://orcid.org/0000-0001-8095-8718

References

Ali, N., K. Atkin, and R. Neal. 2006. "The Role of Culture in the General Practice Consultation Process." *Ethnicity & Health* 11 (4): 389–408. https://doi.org/10.1080/13557850600824286.

Amlani, A. M. 2020. "Influence of Provider Interaction on Patient's Readiness Toward Audiological Services and Technology." *Journal of the American Academy of Audiology* 31 (5): 342–353. https://doi.org/10.3766/jaaa.19051.

Beck, K., and J. Kulzer. 2018. "Teaching Counseling Microskills to Audiology Students: Recommendations from Professional Counseling Educators." *Seminars in Hearing* 39 (1): 91–106. https://doi.org/10.1055/s-0037-1613709.

Bennett, R. J., I. Kelsall-Foreman, S. Donaldson, M. Olaithe, L. Saulsman, and J. C. Badcock. 2021. "Exploring Current Practice, Knowledge, and Training Needs for Managing Psychosocial Concerns in the Audiology Setting: Perspectives of Audiologists, Audiology Reception Staff, and Managers." *American Journal of Audiology* 30 (3): 557–589. https://doi.org/10.1044/2021_AJA-20-00189.

Bennett, R. J., C. Meyer, and R. H. Eikelboom. 2016. "Does Clinician Continuity Influence Hearing Aid Outcomes?" *International Journal of Audiology* 55 (10): 556–563. https://doi.org/10.1080/14992027.2016.1185169.

Bisgaard, N., S. Zimmer, M. Laureyns, and J. Groth. 2022. "A Model for Estimating Hearing Aid Coverage World-Wide Using Historical Data on Hearing Aid Sales." *International Journal of Audiology* 61 (10): 841–849. https://doi.org/10.1080/14992027.2021.1962551.

Boisvert, I., J. Clemesha, E. Lundmar, E. Crome, C. Barr, and C. M. McMahon. 2017. "Decision-Making in Audiology: Balancing Evidence-Based Practice and Patient-Centered Care." *Trends in Hearing* 21: 2331216517706397. https://doi.org/10.1177/2331216517706397.

Boothroyd, A. 2007. "Adult Aural Rehabilitation: What Is It and Does It Work?" *Trends in Amplification* 11 (2): 63–71. https://doi.org/10.1177/1084713807301073.

Brodie, A., B. Smith, and J. Ray. 2018. "The Impact of Rehabilitation on Quality of Life after Hearing Loss: A Systematic Review." *European Archives of Oto-Rhino-Laryngology* 275 (10): 2435–2440. https://doi.org/10.1007/s00405-018-5100-7.

Brooks, J., S. McCluskey, E. Turley, and N. King. 2015. "The Utility of Template Analysis in Qualitative Psychology Research." *Qualitative Research in Psychology* 12 (2): 202–222. https://doi.org/10.1080/14780887.2014.955224.

Caruso, M. 2017. "The Patient-Physician Relationship from the Perspective of Economically Disadvantaged Patients." Doctoral diss., Antioch University.

Cassarly, C., L. J. Matthews, A. N. Simpson, and J. R. Dubno. 2020. "The Revised Hearing Handicap Inventory and Screening Tool Based on Psychometric Reevaluation of the Hearing Handicap Inventories for the Elderly and Adults." *Ear and Hearing* 41 (1): 95–105. https://doi.org/10.1097/AUD.0000000000000746.

Chisolm, T. H., C. E. Johnson, J. L. Danhauer, L. J. P. Portz, H. B. Abrams, S. Lesner, P. A. McCarthy, and C. W. Newman. 2007. "A Systematic Review of Health-Related Quality of Life and Hearing Aids: Final Report of the American Academy of Audiology Task Force on the Health-Related Quality of Life Benefits of Amplification in Adults." *Journal of the American Academy of Audiology* 18 (2): 151–183. https://doi.org/10.3766/jaaa.18.2.7.

Coleman, C. K., K. Muñoz, C. W. Ong, G. M. Butcher, L. Nelson, and M. Twohig. 2018. "Opportunities for Audiologists to Use Patient-Centered Communication during Hearing Device Monitoring Encounters." *Seminars in Hearing* 39 (1): 32–43. https://doi.org/10.1055/s-0037-1613703.

Dockens, A. L., M. L. Bellon-Harn, E. S. Burns, V. Manchaiah, and O. Hinojosa. 2017. "Examination of an Audiologist's Response to Patient's Expression of Symptoms: A Pilot Study." *Journal of Audiology & Otology* 21 (2): 115–119. https://doi.org/10.7874/jao.2017.21.2.115.

Ekberg, K., C. Grenness, and L. Hickson. 2014. "Addressing Patients' Psychosocial Concerns Regarding Hearing Aids within Audiology Appointments for Older Adults." *American Journal of Audiology* 23 (3): 337–350. https://doi.org/10.1044/2014_AJA-14-0011.

Ekberg, K., B. Timmer, S. Schuetz, and L. Hickson. 2021. "Use of the Behaviour Change Wheel to Design an Intervention to Improve the

Implementation of Family-Centred Care in Adult Audiology Services." *International Journal of Audiology* 60 (sup2): 20–29. https://doi.org/10.1080/14992027.2020.1844321.

Ekberg, K., B. H. Timmer, A. Francis, and L. Hickson. 2023. "Improving the Implementation of Family-Centred Care in Adult Audiology Appointments: A Feasibility Intervention Study." *International Journal of Audiology* 62 (9): 900–912. https://doi.org/10.1080/14992027.2022.2095536.

English, K., L. L. Mendel, T. Rojeski, and J. Hornak. 1999. "Counseling in Audiology, or Learning to Listen: Pre- and Post-Measures from an Audiology Counseling Course." *American Journal of Audiology* 8 (1): 34–39. https://doi.org/10.1044/1059-0889(1999/007).

Gallagher, N. E., and J. V. Woodside. 2018. "Factors Affecting Hearing Aid Adoption and Use: A Qualitative Study." *Journal of the American Academy of Audiology* 29 (4): 300–312. https://doi.org/10.3766/jaaa.16148.

Galvin, K., D. Tomlin, B. H. Timmer, Z. McNeice, N. Mount, K. Gray, and C. Short. 2024. "A Qualitative Study of Consumer Perspectives for a Future Mobile App to Document Real-World Listening Difficulties." *JMIR Formative Research* 8:e47578. https://doi.org/10.2196/47578.

Gholamzadeh, M., H. Abtahi, and M. Ghazisaeeidi. 2021. "Applied Techniques for Putting Pre-Visit Planning in Clinical Practice to Empower Patient-Centered Care in the Pandemic Era: A Systematic Review and Framework Suggestion." *BMC Health Services Research* 21 (1): 458. https://doi.org/10.1186/s12913-021-06456-7.

Granberg, S., and Å. Skagerstrand. 2022. "Enhancing Person-Centered Audiologic Rehabilitation: Exploring the Use of an Interview Tool Based on the International Classification of Functioning, Disability, and Health Core Sets for Hearing Loss." *Frontiers in Rehabilitation Sciences* 3:945464. https://doi.org/10.3389/fresc.2022.945464.

Grenness, C., L. Hickson, A. Laplante-Lévesque, and B. Davidson. 2014. "Patient-Centred Audiological Rehabilitation: Perspectives of Older Adults Who Own Hearing Aids." *International Journal of Audiology* 53 Suppl 1 (sup1): S68–S75. https://doi.org/10.3109/14992027.2013.866280.

Grenness, C., L. Hickson, A. Laplante-Lévesque, C. Meyer, and B. Davidson. 2015a. "Communication Patterns in Audiologic Rehabilitation History-Taking." *Ear and Hearing* 36 (2): 191–204. https://doi.org/10.1097/AUD.0000000000000100.

Grenness, C., L. Hickson, A. Laplante-Lévesque, C. Meyer, and B. Davidson. 2015b. "The Nature of Communication Throughout Diagnosis and Management Planning in Initial Audiologic Rehabilitation Consultations." *Journal of the American Academy of Audiology* 26 (1): 36–50. https://doi.org/10.3766/jaaa.26.1.5.

Hartley, D., E. Rochtchina, P. Newall, M. Golding, and P. Mitchell. 2010. "Use of Hearing Aids and Assistive Listening Devices in an Older Australian Population." *Journal of the American Academy of Audiology* 21 (10): 642–653. https://doi.org/10.3766/jaaa.21.10.4.

Heffernan, E., D. W. Maidment, and M. A. Ferguson. 2023. "A Qualitative Study Showing That a Telecare Tool Can Have Benefits before and during the Initial Hearing Assessment Appointment." *International Journal of Audiology* 62 (4): 295–303. https://doi.org/10.1080/14992027.2022.2041740.

Heider, F. 1958. *The Psychology of Interpersonal Relations*. New York: Wiley.

Hickson, L., C. Meyer, K. Lovelock, M. Lampert, and A. Khan. 2014. "Factors Associated with Success with Hearing Aids in Older Adults." *International Journal of Audiology* 53 Suppl 1 (sup1): S18–S27. https://doi.org/10.3109/14992027.2013.860488.

Holman, J. A., A. Drummond, and G. Naylor. 2021. "Hearing Aids Reduce Daily-Life Fatigue and Increase Social Activity: A Longitudinal Study." *Trends in Hearing* 25:23312165211052786. https://doi.org/10.1177/23312165211052786.

Hughes, J. C., C. Bamford, and C. May. 2008. "Types of Centredness in Healthcare: Themes and Concepts." *Medicine, Health Care, and Philosophy* 11 (4): 455–463. https://doi.org/10.1007/s11019-008-9131-5.

Jorgensen, L., and M. Novak. 2020. "Factors Influencing Hearing Aid Adoption." *Seminars in Hearing* 41 (1): 6–20. https://doi.org/10.1055/s-0040-1701242.

Knoetze, M., V. Manchaiah, B. Mothemela, and D. W. Swanepoel. 2023. "Factors Influencing Hearing Help-Seeking and Hearing Aid Uptake in Adults: A Systematic Review of the Past Decade." *Trends in Hearing* 27: 23312165231157255. https://doi.org/10.1177/23312165231157255.

Knudsen, L. V., M. Oberg, C. Nielsen, G. Naylor, and S. E. Kramer. 2010. "Factors Influencing Help Seeking, Hearing Aid Uptake, Hearing Aid Use and Satisfaction with Hearing Aids: A Review of the Literature." *Trends in Amplification* 14 (3): 127–154. https://doi.org/10.1177/1084713810385712.

Kochkin, S. 2011. "MarkeTrak VIII Patients Report Improved Quality of Life with Hearing Aid Usage." *The Hearing Journal* 64 (6): 25–26. https://doi.org/10.1097/01.HJ.0000399150.30374.45.

Laplante-Lévesque, A., L. Hickson, and L. Worrall. 2010. "A Qualitative Study of Shared Decision Making in Rehabilitative Audiology." *Journal of the Academy of Rehabilitative Audiology* 43:27–43.

Laplante-Lévesque, A., L. D. Jensen, P. Dawes, and C. Nielsen. 2013. "Optimal Hearing Aid Use: Focus Groups with Hearing Aid Clients and Audiologists." *Ear and Hearing* 34 (2): 193–202. https://doi.org/10.1097/AUD.0b013e31826a8ecd.

Lim, C., A. B. L. Berry, T. Hirsch, A. L. Hartzler, E. H. Wagner, E. Ludman, and J. D. Ralston. 2016. ""It Just Seems Outside My Health": How Patients with Chronic Conditions Perceive Communication Boundaries with Providers." DIS. Designing Interactive Systems (Conference), 2016, 1172–1184. https://doi.org/10.1145/2901790.2901866.

Manusov, V., and B. Spitzberg. 2008. "Attribution Theory." In *Engaging Theories in Interpersonal Communication: Multiple Perspectives*, edited by, LA. Baxter and DO. Braithwaite. 37–49.

Matulis, J. C., and R. McCoy. 2021. "Patient-Centered Appointment Scheduling: A Call for Autonomy, Continuity, and Creativity." *Journal of General Internal Medicine* 36 (2): 511–514. https://doi.org/10.1007/s11606-020-06058-9.

McNeice, Z., D. Tomlin, B. Timmer, C. E. Short, G. Nixon, and K. Galvin. 2024a. "A Scoping Review Exploring How Adults Self-Describe and Communicate about the Listening Difficulties They Experience." *International Journal of Audiology* 63 (3): 163–170. https://doi.org/10.1080/14992027.2023.2245136.

McNeice, Z., D. Tomlin, B. H. Timmer, C. E. Short, and K. Galvin. 2024b. "Adults' Recollections of Discussions with Their Audiologist: A Qualitative Study of What Was and Was Not Successfully Communicated about Listening Difficulties." *International Journal of Audiology*: 1–12. https://doi.org/10.1080/14992027.2024.2351033.

Merrill, E., and J. Grassley. 2008. "Women's Stories of Their Experiences as Overweight Patients." *Journal of Advanced Nursing* 64 (2): 139–146. https://doi.org/10.1111/j.1365-2648.2008.04794.x.

Meyer, C., C. Barr, A. Khan, and L. Hickson. 2017. "Audiologist-Patient Communication Profiles in Hearing Rehabilitation Appointments." *Patient Education and Counseling* 100 (8): 1490–1498. https://doi.org/10.1016/j.pec.2017.03.022.

Moreland, J., T. L. French, and G. P. Cumming. 2015. "The Prevalence of Online Health Information Seeking among Patients in Scotland: A Cross-Sectional Exploratory Study." *JMIR Research Protocols* 4 (3): e4010. https://doi.org/10.2196/resprot.4010.

Mummah, S. A., T. N. Robinson, A. C. King, C. D. Gardner, and S. Sutton. 2016. "IDEAS (Integrate, Design, Assess, and Share): A Framework and Toolkit of Strategies for the Development of More Effective Digital Interventions to Change Health Behaviour." *Journal of Medical Internet Research* 18 (12): e317. https://doi.org/10.2196/jmir.5927.

National Institute on Deafness and Other Communication Disorders. 2021. "Statistics and Epidemiology: Hearing, Ear Infections and Deafness." https://www.nidcd.nih.gov/health/statistics.

Ng, J. H. Y., and A. Y. Loke. 2015. "Determinants of Hearing-Aid Adoption and Use among the Elderly: A Systematic Review." *International Journal of Audiology* 54 (5): 291–300. https://doi.org/10.3109/14992027.2014.966922.

Nickbakht, M., C. J. Meyer, L. Saulsman, N. A. Pachana, R. H. Eikelboom, R. S. Bucks, and R. J. Bennett. 2023. "Barriers and Facilitators to Asking Adults with Hearing Loss about Their Emotional and Psychological Well-Being: A COM-B Analysis." *International Journal of Audiology* 62 (6): 562–570. https://doi.org/10.1080/14992027.2022.2056090.

Nishikawara, R. K., I. Z. Schultz, L. D. Butterfield, and J. W. Murray. 2023. ""You Have to Believe the Patient": What Do People with Fibromyalgia Find Helpful (and Hindering) When Accessing Health Care?" *Canadian Journal of Pain* 7 (2): 1–9. https://doi.org/10.1080/24740527.2023.2176745.

Orji, A., K. Kamenov, M. Dirac, A. Davis, S. Chadha, and T. Vos. 2020. "Global and Regional Needs, Unmet Needs and Access to Hearing Aids." *International Journal of Audiology* 59 (3): 166–172. https://doi.org/10.1080/14992027.2020.1721577.

Parmar, B. J., K. Mehta, D. A. Vickers, and J. K. Bizley. 2022. "Experienced Hearing Aid Users' Perspectives of Assessment and Communication within Audiology: A Qualitative Study Using Digital Methods." *International Journal of Audiology* 61 (11): 956–964. https://doi.org/10.1080/14992027.2021.1998839.

Poost-Foroosh, L., M. B. Jennings, L. Shaw, C. N. Meston, and M. F. Cheesman. 2011. "Factors in Client-Clinician Interaction That Influence Hearing Aid Adoption." *Trends in Amplification* 15 (3): 127–139. https://doi.org/10.1177/1084713811430217.

Preminger, J. E., M. Oxenbøll, M. B. Barnett, L. D. Jensen, and A. Laplante-Lévesque. 2015. "Perceptions of Adults with Hearing Impairment Regarding the Promotion of Trust in Hearing Healthcare Service Delivery." *International Journal of Audiology* 54 (1): 20–28. https://doi.org/10.3109/14992027.2014.939776.

Sansoni, J. E., P. Grootemaat, and C. Duncan. 2015. "Question Prompt Lists in Health Consultations: A Review." *Patient Education and Counseling* 98 (12): 1454–1464. https://doi.org/10.1016/j.pec.2015.05.015.

Scarinci, N., K. Tulloch, C. Meyer, K. Ekberg, and C. Lind. 2022. "Using an Online Tool to Apply a Person-Centred Approach in Audiological Rehabilitation: A Pilot Study." *Audiology Research* 12 (6): 620–634. https://doi.org/10.3390/audiolres12060060.

Scholl, I., J. M. Zill, M. Härter, and J. Dirmaier. 2014. "An Integrative Model of Patient-Centeredness – A Systematic Review and Concept Analysis." *PLoS One* 9 (9): e107828. https://doi.org/10.1371/journal.pone.0107828.

Sciacca, A., C. Meyer, K. Ekberg, C. Barr, and L. Hickson. 2017. "Exploring Audiologists' Language and Hearing Aid Uptake in Initial Rehabilitation Appointments." *American Journal of Audiology* 26 (2): 110–118. https://doi.org/10.1044/2017_AJA-16-0061.

Skivington, K., L. Matthews, S. A. Simpson, P. Craig, J. Baird, J. M. Blazeby, K. A. Boyd, et al. 2021. "A New Framework for Developing and Evaluating Complex Interventions: Update of Medical Research Council Guidance." *BMJ* 374: n2061. https://doi.org/10.1136/bmj.n2061.

Timmer, B. H., S. Launer, and L. Hickson. 2021. "Using Smartphone Technology to Support the Adult Audiologic Rehabilitation Journey." *International Journal of Audiology* 60 (sup1): S61–S67. https://doi.org/10.1080/14992027.2020.1854483.

Timmer, B. H. B., R. J. Bennett, J. Montano, L. Hickson, B. Weinstein, J. Wild, M. Ferguson, J. A. Holman, V. LeBeau, and L. Dyre. 2024. "Social-Emotional Well-Being and Adult Hearing Loss: Clinical Recommendations." *International Journal of Audiology* 63 (6): 381–392. https://doi.org/10.1080/14992027.2023.2190864.

Vercammen, C., I. Oosthuizen, V. Manchaiah, P. Ratinaud, S. Launer, and D. W. Swanepoel. 2023. "Real-Life and Real-Time Hearing Aid Experiences: Insights from Self-Initiated Ecological Momentary Assessments and Natural Language Analysis." *Frontiers in Digital Health* 5:1104308. https://doi.org/10.3389/fdgth.2023.1104308.

Wolff, A., S. S. Houmøller, L. T. Tsai, D. D. Hougaard, M. Gaihede, D. Hammershøi, and J. H. Schmidt. 2024. "The Effect of Hearing Aid Treatment on Health-Related Quality of Life in Older Adults with Hearing Loss." *International Journal of Audiology* 63 (7): 500–509. https://doi.org/10.1080/14992027.2023.2218994.

Zill, J. M., I. Scholl, M. Härter, and J. Dirmaier. 2015. "Which Dimensions of Patient-Centeredness Matter? – Results of a Web-Based Expert Delphi Survey." *PLoS One* 10 (11): e0141978. https://doi.org/10.1371/journal.pone.0141978.